

IN THE CLAIMS:

1.-2. (canceled)

3. (currently amended) The method of claim [[2]] 13 further comprising a vacuum source connected to a vacuum port in the main processor to suction out a pneumatic stream comprising the pneumatic carrier, vapors, and suspension particles.

4. (original) The method of claim 3 further comprising a separation process between the vacuum source and the vacuum port of the main processor to separate the pneumatic stream into one component or set of components and another component or set of components, wherein said one component or set of components comprises substantially particle matter as said other component or set of components comprises variously the pneumatic carrier, vapors and perhaps ultra-fine particulate matter.

5. (currently amended) The method of claim [[2]] 12 wherein the hot pneumatic carrier comprises a hot dry clean gas including hot air or, alternatively, hot flue/exhaust gases from a combustion process.

6. (currently amended) The method of claim [[1]] 13 wherein the level of vacuum inside the main processor is preferably achieved down to or below essentially $\frac{2}{3}$ ^{rds} an atmosphere.

7. (original) The method of claim 6 wherein the level of pressure with the pre-heating process comprises generally the local barometric pressure of the geographic vicinity where said method is being carried out.

8. (currently amended) The method of claim ~~[[1]]~~ 13 wherein and said pre-heated ~~manure~~ waste stream is introduced into the main processor at a mean bulk temperature measuring over 135°C.

9.-11. (canceled)

12. (currently amended) ~~The method of claim 11~~

A method for treating a waste stream for reduction in part to a solid particulate fraction that is suitable for bulk freighting to remote and widely distributed destinations, comprising the steps of:

supplying a raw waste stream inclusive of natural fatty acids and/or natural oils or fats;

providing a main processor that operates at a level of vacuum;

at a relatively elevated pressure, pre-heating the waste stream in order to elevate the mean bulk temperature to above what corresponds to a boiling temperature at the main processor's vacuum level for one of the natural fatty acids and/or natural oils or fats without boiling said one away;

introducing the pre-heated waste stream into the main processor whereby a fractional percentage of said one of natural fatty acid and/or natural oil or fat flashes into vapor, this presumptively promoting the waste stream for disintegrating into a solid particulate fraction suitable for bulk freighting;

providing the main processor with a throughput of a hot pneumatic carrier for syphoning up and suspending particles of the solid particulate fraction from out of the disintegrating waste stream;

providing a vacuum source connected to a vacuum port in the main processor to suction out a pneumatic stream comprising the pneumatic carrier, vapors, and suspension particles; and

further comprising a separation process between the vacuum source and the vacuum port of the main processor to separate the pneumatic stream into one component or set of components comprising substantially particulate matter as well as into another component or set of components comprising variously the pneumatic carrier, vapors and perhaps ultra-fine particulate matter.

13. (currently amended) ~~The method of claim 10~~

A method for treating a waste stream for reduction in part to a solid particulate fraction that is suitable for bulk freighting to remote and widely distributed destinations, comprising the steps of:

supplying a raw waste stream inclusive of natural fatty acids and/or natural oils or fats;

providing a main processor that operates at a level of vacuum;

at a relatively elevated pressure, pre-heating the waste stream in order to elevate the mean bulk temperature to above what corresponds to a boiling temperature at the main processor's vacuum level for one of the natural fatty acids and/or natural oils or fats without boiling said one away;

introducing the pre-heated waste stream into the main processor whereby a fractional percentage of said one of natural fatty acid and/or natural oil or fat flashes into vapor, this presumptively promoting the waste stream for disintegrating into a solid particulate fraction suitable for bulk freighting; and

further providing the main processor with a throughput of a hot pneumatic carrier for syphoning up and suspending particles of the solid particulate fraction from out of the disintegrating waste stream;

wherein the hot pneumatic carrier comprises a hot dry clean gas including hot air or ~~, alternatively,~~ hot flue/exhaust gases from a combustion process.

14. (currently amended) The method of claim [[9]] 12 wherein the level of vacuum inside the main processor is preferably achieved down to or below essentially $\frac{2}{3}$ rds an atmosphere as the relatively elevated pressure of the pre-heating process comprises generally the local barometric pressure of the geographic vicinity where said method is being carried out.

15. (currently amended) The method of claim [[9]] 12 wherein said pre-heated ~~manure waste~~ stream is introduced into the main processor at a bulk temperature measuring over 135°C.

16-20. (withdrawn)

21. (new) A method of outputting material having reduced moisture and/or oily-substance content relative to an initial input therefor, comprising the steps of:

preheating the input in a relatively higher pressure environment,
inputting the pre-heated input to a relatively lower pressure environment,
syphoning out vapors and suspending material of the pre-heated input apart from non-suspending residuals, and
outputting the material that syphoned out apart from the vapors and pneumatic carrier.

22. (new) The method of claim 21 wherein the input has vaporizing fractions including any of moisture, fatty acids, natural oils/fats, or other.

22. (new) The method of claim 21 wherein the step of inputting the pre-heated input to a relatively lower pressure environment concurrently includes introducing a pneumatic carrier; and

the step of syphoning out vapors and suspending material concurrently includes syphoning out the pneumatic carrier.

23. (new) The method of claim 22 wherein the pneumatic current comprises a hot dry clean gas including hot air or, alternatively, hot flue/exhaust gases from a combustion process.

24. (new) The method of claim 21 wherein the step of syphoning out the relatively lower pressure environment further includes doing so by virtue of a suction source; and

the step of outputting the material that syphoned out further includes interposing a separation process between the suction source and relatively lower pressure environment to separate the material that syphoned out from about all else.

25. (new) The method of claim 21 further comprising withdrawing non-suspending residuals from the relatively lower pressure environment by mechanical conveyance.

26. (new) The method of claim 21 wherein the relatively lower pressure environment comprises a generally horizontal duct having a cylindrical interior wall extending axially between spaced first and second points on the central axis therefor, one or more scrapers disposed for scraping coatings from the wall, and a drive for revolving wall or moving the one or more scrapers as a preventative measure to fight against incrustations from hardening on the wall.

27. (new) The method of claim 26 wherein the one or more scrapers comprises the outer edge of a driven auger.

28. (new) The method of claim 26 wherein the one or more scrapers comprises the outer edge of a driven ribbon auger.

29. (new) A material output, having reduced moisture and/or oily-substance content relative to an initial input therefor, acquired from the initial input therefor in accordance with the method of claim 21.

30. (new) A process line for inputting an input stream and outputting a material stream having reduced moisture and/or oily-substance content relative to the input stream in accordance with the method of claim 21.